

San José State University
Lucas Graduate School of Business
Master of Science in Transportation Management
MTM 215: Transportation Planning and Project Development
Fall-B 2024

Course and Instructor Contact Information

Instructor:	Dr. Nick Compin
Office Hours:	By appointment
Class Day/Time:	Tuesdays, 5:30-9:30 pm, on Oct. 1, 8, 15, 22, 29; Nov. 5, 12, 19, (<u>No Class on 11/26 Thanksgiving Break</u>); Dec. 3, 10.
Classroom:	Online (Zoom)
Course website:	Canvas (http://sjsu.instructure.com)

Course Format

Students must have regular access to email and the internet in order to communicate with the instructor, submit assignments, and engage in other class activities.

Students attend class sessions online using Zoom, SJSU's online meeting application. During classes, students should:

- Be in a quiet room without distractions (e.g., no family members or colleagues walking through or asking questions)
- Have stable internet access
- Use a video camera and good quality microphone so that you are seen as well as heard
- Follow good "meeting etiquette" principles (one such list: <https://blog.gotomeeting.com/7-rules-virtual-meeting-etiquette-every-professional-know/>)

Plan to join at least ten minutes before 5:30 pm, to make sure you are ready when class begins. (The very first time you join from a computer or device, allow extra time for set-up.)

The university has many useful tutorials on how to use Zoom here: <http://www.sjsu.edu/ecampus/teaching-tools/zoom/index.html>

Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on my faculty web page at <http://www.sjsu.edu/people/firstname.lastname> and/or on [Canvas Learning Management System course login website](#) at <http://sjsu.instructure.com>. You are responsible for regularly checking with the

messaging system through [MySJSU](http://my.sjsu.edu) at <http://my.sjsu.edu> (or other communication system as indicated by the instructor) to learn of any updates.

Course Description

Examines management of transportation planning and project development processes, including: regional and state system-wide planning; project-level planning; environmental review; obtaining governmental approvals and permits; contract management; and project management.

MSTM Program Learning Goals:

(*Note:* Not all program learning goals are covered in every course)

- Goal 1: Transportation Systems and Society:** Craft management decisions that integrate knowledge of multi-modal transportation, social, and environmental systems
- Goal 2: Innovation:** Develop innovative solutions to transportation management challenges
- Goal 3: Leadership:** Develop high-impact leadership styles and competencies (traits, skills, behaviors)
- Goal 4: Communications:** Communicate effectively with a diverse workforce and citizenry
- Goal 5: Analytical skills:** Identify and evaluate transportation management issues using appropriate data and methods

Course Learning Outcomes

In this course students will explore the planning and development of surface transportation systems in the context of current and past government goals, policies and regulations. The goal is for students to begin to understand the complex interrelationships that exist between transportation, land use, and the environment, the balancing of competing interests in the multi-faceted and multi-jurisdictional intergovernmental settings that are characteristic of states and major metropolitan areas, and the processes followed to develop consensus on transportation strategies.

Upon successful completion of this course, students will be able to:

1. Explain the general history of transportation planning in the US and the impact of transportation planning on the transportation system.
2. Explain current processes and theories for state, regional, and project planning
3. Explain how community involvement and environmental review influence planning processes
4. Design effective and feasible performance measurement tools
5. Explain best practices in managing contracts and contractors
6. Explain the basic tenants of project management

Required Texts/Readings

Textbook

The Geography of Urban Transportation, Fourth Edition Genevieve Giuliano and Susan Hanson
Guilford Press, 2017 - Science – 400 pages. ISBN-13: 978-1462529650 ISBN-10: 1462529658

There are many on-line sources for this text.

Other Readings

Any additional reading will either be publicly available or be provided by the Professor.

Library Liaison

The Library Liaison for the Lucas Graduate School of Business is Christa Bailey (christa.bailey@sjsu.edu).

Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course for instruction, preparation/studying, or course related activities.

The following activities/assignments are required in this course and will be graded: session class discussion/current events – each student is expected to bring a current event to each class session and be able to discuss the transportation planning issues it relates to; a team assignment – students will be assigned to teams to research transportation data and present findings to the class; two in-class writing assignments – each student will be expected to complete two, two-page writing assignments to assist students with brainstorming and creating outlines for class papers; two individual class papers – each student will be expected to complete two 5-10 page papers on transportation-related topics; and a course project – students may work individually or in pairs to complete a transportation plan and present it to their classmates.

Assignments/papers are open book, open notes, and will be sent out to students during specified times. Each student will be allowed a specified amount of time to complete each assignment/paper. Students will then be required to e-mail their completed assignments/papers to the instructor. Any technical difficulties encountered should be reported to the instructor immediately. Tentative course calendar including assignment due dates, date of final exam is “subject to change with fair notice”.

Final Examination or Evaluation

The course project is due to the instructor on the last day of class (emailed to the professor prior to the start of class at 5:30 PM). Students are also required to make a presentation to the class discussing their course projects during the last class meeting.

Students are allowed to work individually or in groups of two students. If students work in groups, they must describe the roles and responsibilities of each team member in the completion of the project and final report.

All work must be submitted via e-mail to the instructor as an attachment in MS Word or PDF format. All Course Project reports require an Executive Summary and a Table of Contents. Students should clearly identify all of their work with the student’s name clearly indicated on all submitted work and each document title: last name first, first name last and the title of the assignment. Late paper and project assignments will be accepted but the score will be reduced one full letter grade for missing the due date and/or time. In-class assignments may be made up if issues leading to their not being completed are discussed with the professor before or shortly after the time of the missed class. Missed assignments will result in a score of zero. Students who turn assignments in on time will normally receive comments from me within 7-10 days.

Grading Information

The following chart lists value of each graded assignment and its relationship to overall course grading. Each graded assignment will be returned to students within 7-10 days of submittal with comments indicating areas for improvement and to show how specific grades were determined and assigned. Students will have an opportunity to contact the instructor at any time to discuss grades, progress, or other issues as necessary. Should a student wish to speak directly with the instructor a mutually beneficial time will be identified, and the student will contact the instructor by phone at the number provided on the first page of this syllabus.

Assignments and Other Graded Activities	Due Date	% of Course Grade	Course Learning Objectives Addressed
In-class Writing Assignment #1	10/15/2022	5%	1, 2, 3, 4, 5
Team Data Assignment #1	10/22/2022	15%	1, 3, 4, 5
In-class Writing Assignment #2	10/29/2022	5%	1, 2, 3, 4, 5
Paper #1	11/05/2022	20%	1, 2, 4, 5
Paper #2	11/19/2022	20%	1, 2, 3, 4, 5
Course Project/Presentation	12/10/2022	30%	1, 2, 3, 4, 5
Presentation Comments	12/13/2022	5%	1, 2, 3, 4, 5

Determination of Grades

Success in this course is based on the expectation that students will attend each scheduled class. Grading will be determined through a combination of scoring on Class Discussion/Current Events, a Class Data Assignment, Two In-class Writing Assignments, Two Class Papers, and a Course Project.

- Class Discussion/Current Events: Students are expected to have reading assignments completed and be prepared, on the date indicated in the schedule of assignments (below), to discuss the assigned readings and additional readings assigned or as required for the full development of classroom discussions. Students are required to bring with them to every class one current event that they may be asked to present to and analyze for the class. Readiness to discuss current events will be noted and referenced when assigning points for this portion of the course as follows: participation in 9 or 10 class sessions = 5 pts; participation in discussion for 8 class sessions = 3 pts; participation in fewer than 8 sessions = 0 pts.
- Course Project and Assignments/Papers: Please see above.
- Assignments turned in late, will result in a full grade reduction. For example, if a paper were awarded an A, but was turned in late, the assigned grade would be a B. Unless cleared by the instructor, all assignments are due on the date of the last day of class.

* Extra credit is NOT available in this course.

Letter grade calculation

Percentage	Grade
98% - 100%	A+
97% - 94%	A
93% - 90%	A-
89% - 87%	B+
86% - 84%	B
83% - 80%	B-
79% - 77%	C+
76% - 74%	C
73% - 70%	C-
69% - 67%	D+
66% - 64%	D
63% - 60%	D-
below 60%	F

University Policies

Per [University Policy S16-9](#), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on this [Syllabus Information web page](#). Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

Note: This schedule is subject to change with fair notice. If necessary, the instructor will provide all information regarding schedule changes in class or by e-mail and through Canvas.

Week	Date	Reading
1	10/01	<p>Course Overview Student/Instructor Expectations Discussion of Class Papers, Assignments and Project Transportation Planning in Perspective</p> <p>I. Setting the Scene - Reading</p> <p>1. Introducing Urban Transportation – Susan Handy</p> <p>Discussion - What makes a region a “good” place to locate? What makes a city a “good” place to locate? If you are not there now, what are the barriers? People and business – same or different?</p> <p>2. The Geography of Urban Freight – Laetitia Dablanc and Jean-Paul Rodrigue</p> <p>Discussion - What is the role of government in goods movement? What about different levels of government?</p> <p>★ Urban Transportation Planning in the United States: An Historical Overview by Ed Weiner, 1997. Skim Chapters 1-9 (Get an idea of the History of the system in the US. When it began how and why and when it expanded, how and why?) https://rosap.ntl.bts.gov/view/dot/13691</p>
2	10/08	<p>I. Setting the Scene – Reading</p> <p>3. Transformation and Urban Form: Stages in the Spatial Evolution of the American Metropolis – Peter O. Muller</p> <p>Discussion – Think of a modern city that had its origins hundreds or thousands of years ago. What portions of that early city still remain? What does the transportation system look like today? How does the current transportation system accommodate those early beginnings?</p> <p>4. Impact of Information and Communication Technologies – Giovanni Circella and Patricia L. Mokhtarian</p> <p>Discussion – How do these technologies affect your residential location and mobility choices now? What about in 20-25 years? Make an educated guess!</p>
3	10/15	<p>II. Planning for Movement Within Cities</p> <p>5. Theories and Models in Transportation Planning – Harvey J. Miller</p> <p>6. Regional Transportation Planning – Gian-Claudia Sciara and Susan Handy</p> <p>Discussion – What does regional transportation planning look like in the region you live in? What impact do regional issues have on local policies?</p> <p>Learn More: ISTEA/TEA-21/SAFETEA-LU/MAP-21/FAST/IJA Overview: Statewide and Metropolitan Planning Requirements; Elements of the Transportation Planning Process</p> <p>Code of Federal Regulations (CFR), Statewide Transportation Planning; Metropolitan Transportation Planning Regulations; (23 CFR Parts 450) https://www.gpo.gov/fdsys/granule/CFR-2001-title23-vol1/CFR-2001-title23-vol1-sec450-206</p>

Paper #1
Discussion

In-Class
Writing
Assignment #1

		<p>USDOT, A Guide to Metropolitan Transportation Planning Under ISTEA - How the Pieces Fit Together - U.S.D.O.T 1991. https://trid.trb.org/view.aspx?id=423085</p> <p>USDOT / FHWA – Statewide Transportation Planning http://www.fhwa.dot.gov/planning/processes/statewide/index.cfm</p> <p>TEA-21 - Transportation Equity Act for the 21st Century A Summary 1998 – An Overview http://www.fhwa.dot.gov/tea21/sumover.htm</p> <p>Statewide Planning http://www.fhwa.dot.gov/tea21/factsheets/statepln.htm</p> <p>Metropolitan Planning http://www.fhwa.dot.gov/tea21/factsheets/metropoln.htm</p> <p>Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) 2005 http://www.fhwa.dot.gov/safetealu/index.htm http://www.fhwa.dot.gov/safetealu/summary.htm</p> <p>MAP-21 - Moving Ahead for Progress in the 21st Century 2012 http://www.fhwa.dot.gov/map21/ http://www.fhwa.dot.gov/map21/summaryinfo.cfm</p> <p>FAST – Fixing America’s Surface Transportation 2015 http://www.fhwa.dot.gov/fastact/</p> <p>Infrastructure Investment and Jobs Act, 2021. H.R.3684 - 117th Congress (2021-2022): Infrastructure Investment and Jobs Act Congress.gov Library of Congress</p> <p>California Regional Transportation Commission, California Regional Transportation Plan Guidelines https://catc.ca.gov/programs/transportation-planning</p> <p>2024 Regional Transportation Plan Guidelines for Regional Transportation Planning Agencies https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/division-transportation-planning/regional-and-community-planning/sustainable-transportation-planning-grants/adopted-2024-rtp-guidelines-for-rtpas-2-a11y.pdf</p>
4	10/22	<p>II. Planning for Movement Within Cities</p> <p>7. Land Use, Travel Behavior, and Disaggregate Travel Data – Marlon G. Boarnet</p> <p>III. Policy Issues</p> <p>8. Mass Transit – Lisa Schweitzer</p> <p>Discussion – How do we get more people to use mass transit?</p> <p>Learn More:</p> <p>Why We Plan for Alternative Modes – The Law USC Title 23 - Highways Chapter I - FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION (Parts 1 - 973) Subchapter E - PLANNING AND RESEARCH (Parts 420 - 470) Part 450 - PLANNING ASSISTANCE AND STANDARDS Sub Part A-C eCFR :: 23 CFR Part 450 -- Planning Assistance and Standards</p> <p>Learn More:</p> <p>Public Involvement in Transportation Decision Making http://www.fhwa.dot.gov/planning/public_involvement/index.cfm</p>
5	10/29	<p>III. Policy Issues</p> <p>9. Land Use Impact of Transportation Investments – Genevieve Giuliano and Ajay Agarwal</p> <p>Discussion – What came first? The chicken or the egg? How do transportation and land use interact?</p> <p>What’s New? A whole bunch! FILL IN</p> <p>Learn More: Land Use Impacts Long Term Land Use Effects of New Rail Investment: Lessons from San Diego 2018 https://www.mdpi.com/2413-8851/2/1/6/pdf</p>

**Data
Assignment -
Presentation**

**Paper #1
Due**

**Paper #2
Discussion**

In-Class Writing Assignment #2

		<p>Boarnet, Marlon G. and Nicholas S. Compin (1999), “Transit-Oriented Development in San Diego County: Incrementally Implementing a Planning Idea,” UCI-ITS-WP-96-7. http://www.reconnectingamerica.org/assets/Uploads/bestpractice027.pdf</p> <p>The great Smart Growth Debate Conte, Christopher (2000), “The Boys of Sprawl,” Governing Magazine, May. http://www.governing.com/topics/transportation-infrastructure/Boys-Sprawl.html</p>
6	11/05	<p>III. Policy Issues</p> <p>10. The Geography of Urban Transportation Finance - Brian D. Taylor</p> <p>Discussion – What have been the impacts of SB1? What are the potential future impacts of SB1? What do you think about a VMT tax – Road User Charge Program? How about County sales tax increases where you live?</p> <p>11. Transportation and Environmental Impacts and Policy – Scott Le Vine and Martin Lee-Gosselin</p> <p>Learn More: Transportation Finance The 2022-23 “CA” Budget Transportation Infrastructure Package The 2022-23 Budget: Transportation Infrastructure Package (ca.gov)</p> <p>Overview of State Transportation Funding – CA Legislative Analysts’ Office 2017 https://catc.ca.gov/-/media/ctc-media/documents/fs-trans-funding-overview-031017-a11y.pdf</p> <p>Transportation Funding in California – Caltrans Division of Transportation Planning - Office of Transportation Economics (OTE) – 2018 Transportation Funding in California Caltrans</p> <p>State Budget 101 Video Series CA State Budget - http://www.lao.ca.gov/Videos/player?playlistId=4</p>
7	11/12	<p>III. Policy Issues</p> <p>12. Transportation and Energy – David L. Greene</p> <p>Discussion – There is no free lunch, so what do we do?</p> <p>13. Social Equity and Urban Transportation – Evelyn Blumenberg</p> <p>Discussion – How can we address social equity issues? What does “balance” look like?</p>
8	11/19	<p>✓ Project Management</p> <ul style="list-style-type: none"> ○ What is the Process? ○ Why is it Important ○ How is it linked to funding? <p>Learn More: Caltrans Project Development Procedures Manual (PDPM) https://dot.ca.gov/programs/design/manual-project-development-procedures-manual-pdpm Project Management Body of Knowledge (PMBOK) https://www.pmi.org/pmbok-guide-standards</p> <p>✓ Transportation Data: Transportation System Performance Measurement, Transportation System Management and Management Systems</p> <p>Learn More: Performance Measurement Fundamentals http://www.ops.fhwa.dot.gov/perf_measurement/index.htm Performance Management Under MAP 21/FAST http://www.fhwa.dot.gov/map21/pm.cfm Development of Performance Measures for the FHWA’s Strategic Plan http://www.fhwa.dot.gov/legsregs/pmeasure.htm</p>

Paper #2 Due

Final Project Discussion

		<p>✓ Travel Demand Forecasting</p> <ul style="list-style-type: none"> ○ What is it? ○ Why is it important? ○ How is done? <p>Learn More: Land Use/Population/Employment Forecasting</p> <p>Search Results Puget Sound Regional Council (psrc.org)</p> <p><i>Click on listed resources to learn more about forecasts.</i></p> <p>https://www.fhwa.dot.gov/planning/tmp/</p> <p>Read to get an idea of what is out there and how they are used!</p> <p>FYI - For More Information on Integrated Transportation Land Use Models https://search.usa.gov/search?utf8=%E2%9C%93&affiliate=dot-fhwa&query=integrated+transportation+and+land+use+models+</p> <p>Travel Demand Forecasting https://video.search.yahoo.com/video/play;_ylt=A2KIo9gZuo5W5yQAbzT7w8QF;_ylu=X3oDMTExdnJhZDlxBHNIYwNzcgRzbGsDdmlkBHZ0aWQDQjA5NDcEZ3BvcwMxNQ-?p=Introduction+To+Travel+Demand+Modeling&vid=91e93767f9134d99ebe536fab448a4&url=http%3A%2F%2Ftse4.mm.bing.net%2Fth%3Fid%3DOVP.V4889e813a73713ea2e95072b30c00746%26pid%3D15.1%26h%3D225%26w%3D300%26c%3D7%26rs%3D1&rurl=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Dh2rxC-0rZLU&tit=Overview+of+the+four-step+transport+demand+model&c=14&h=225&w=300&l=3364&sigr=11bn8u7i9&sigt=11gkceoh9&sigi=13116kb05&age=1372226558&fr2=p%3As%2Cv%3Av&fr=yfp-t-695&tt=b</p> <p>Overview of the four-step transport demand model-Video – 42:40</p> <p>Travel Demand Forecasting: Parameters and Techniques TPB's Four-Step Travel Model - Travel Demand Modeling Metropolitan Washington Council of Governments (mwcog.org)</p> <p>Activity Based Travel Demand Models: A Primer 2015 http://onlinepubs.trb.org/onlinepubs/shrp2/SHRP2_C46.pdf</p> <p>*Through Page 16. You are welcome to read the entire document of course. Pay special attention to the concepts behind activity-based modeling.</p>
<p>11/26</p>	<p>11/26</p>	<p>✓ No Classes Thanksgiving Week</p> <p>✓ See you next Tuesday 11/26</p>
<p>9</p> <p>Guest Presentation TBD Transportation Leader</p>	<p>12/03</p>	<p>III. Policy Issues</p> <p>14. Looking into the Future – Genevieve Giuliano and Susan Hanson</p> <p>The Future of Transportation Video – Watch in Class - http://www.ted.com/talks/bill_ford_a_future_beyond_traffic_gridlock</p> <p>Dream More: http://www.futuristspeaker.com/future-scenarios/2050-and-the-future-of-transportation/ http://www.gizmag.com/future-transport/22959/ https://www.youtube.com/results?search_query=future+of+transportation</p>

10	12/10	Presentation of Class Projects – Discussion/Critique Turn in projects before class – e-mail time stamp!
	12/13	Turn in Class <i>Presentation Comments</i> on 12/13 – These are part of your grade!

NOTE:
Class Projects –
Due Before Class on 12/10 !
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talosjaka@yahoo.com

Dr. Nick's e-mail:
talosjaka@yahoo.com